

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Office of Conservation and Coastal Lands  
Honolulu, Hawai'i

Board of Land and Natural Resources  
Department of Land and Natural Resources  
State of Hawai'i  
Honolulu, Hawai'i

FILE NO.: CDUA OA-3446  
REF: OCCL: MC  
Acceptance Date: October 25, 2007  
180 Exp. Date: April 22, 2008

March 28, 2008

**REGARDING:** Single Family Residence

**APPLICANT:** Michael and Stephanie Chan  
820 Bannister Street  
Honolulu, HI 96819

**AGENT:** Stephen Nakai  
Osumi Nakai Maekawa  
700 Bishop Street, Suite 228  
Honolulu, HI 96813

**LOCATION:** Tantalus, Honolulu, O'ahu

**TMK:** (1) 2-5-18:32

**AREA OF PARCEL:** 90,008 square feet

**AREA OF USE:** 5296 square feet

**SUBZONE:** Resource

**DESCRIPTION OF AREA:**

The proposed project area is located at Tantalus, Honolulu, O'ahu, TMK: (1) 2-5-18:32. The 90,008 square foot property is in the Resource Subzone of State Land Use Conservation District. Exhibit 1 shows the subject area's location.

The parcel is one of five located on Pu'u Kākea Place, a privately-owned cul-de-sac in the Tantalus neighborhood. The Board of Land and Natural Resources approved Conservation District Permit (CDUP) OA-2289 in 1990 for the consolidation and resubdivision of the five properties, and the construction of a single-family residence on each.

There are residences on three of the five lots. OCCL notes that a condition of CDUP OA-2289 was that construction needed to commence within one year of its approval; this proposed residence would therefore not fall under CDUP OA-2289 and will need a new permit.

The Tantalus neighborhood is in the Conservation District, and many of the neighboring parcels have been developed with single family residences. There are no structures on the subject parcel.

The parcel is bounded to the east and west by residences, and to the north and south by the Honolulu Watershed Forest Reserve.

Existing flora is typical of the Tantalus neighborhood. The parcel is dominated by introduced grasses and non-native trees including banyan species, Norfolk pines, brassia, avocado, Christmas berry, and mountain apple. Native and Polynesian-introduced species include kukui, kī, and a single member of the federally listed "Ko'olau Range" 'ohe (*Tetraplasandra gynoscarpa*).

There are no other known archaeological features on the subject parcel. The Moleka Trail runs alongside the property, downhill and approximately 60 to 80 feet from the property boundary. There are no known cultural or recreational practices that take place on the parcel itself.

#### **PROPOSED PROJECT:**

The applicant proposes to construct a 4 bedroom, 4.5 bath two-story residence. The developed area calculations also include a family room, dining room, and living room; a cistern pump room and generator equipment room; and a porte-cochere.

The application provides a residence of 4996 square-feet. Excluded from these calculations is a 272 square foot lanai on the house's western side and a 1224 square-foot "garden lanai" below the master bedroom. However, OCCL notes that the applicant states that their carport is 10' x 20', or 200 square feet. The Floor plan shows that the carport is closer in size to 20' x 25', or 500 square feet. OCCL finds that this would create a total developed area of 5296 square feet. This will be discussed in the final section.

**Exhibit 2** shows the house plan. **Exhibit 3** shows the exterior view of the house.

The residence will be set back 25' on the north, 92' on the south, 280' on the east, and 28' on the west.

Additional paved areas include a 3120 square foot driveway and a 4544 square-foot 'turn-around' area bounded by a rock wall. There is a total of 13,500 square feet of impermeable surface, 7058 square feet of which are not under roof and thus not part of the water catchment system.

The project will involve 1850 cubic yards of cut and fill. This is a significant amount that concerns OCCL, and will be discussed in further detail later in the report.

**Exhibit 4** shows the Site Plan.

Landscaping plans involve protecting and conserving the `ohe, removing 24 non-native trees and two dead koa trees, and replanting the areas around the house and drive with two kukui and a mix of kī, red ginger, monstera, tree fern, and Augustine grass. A six-foot rock wall will be placed at the entry to the property, and the parcel will be surrounded by a chain link fence covered with the invasive pothos vine (a.k.a devil's ivy, *Epipremnum aureum*).

**Exhibit 5** shows the landscaping plan.

OCCL has concerns about the project's size, the amount of grading involved, and landscaping plan's reliance on non-native species. The applicant addressed some of these concerns; they will be discussed in subsequent sections.

#### **AGENCY COMMENTS:**

The CDUA and Draft Environmental Assessment were referred for review and comment to the DLNR – Division of Forestry and Wildlife, Historic Preservation Division, Land Division and Na Ala Hele; Honolulu City and County Planning Department, Honolulu Neighborhood Board No. 10, and the Office of Hawaiian Affairs.

A copy of the CDUA and DEA were available for review at the Hawai'i State Library .

A notice of the application was placed in the Office of Environmental Quality Control's *Environmental Notice* on November 8, 2007. OCCL issued a FONSI and noticed this in the February 8, 2008 edition.

The following comments were received:

#### Office of Hawaiian Affairs (OHA)

OHA is concerned that the EA does not adequately analyze the effect that the proposed landscaping will have on neighboring native plant communities. OHA concurs with OCCL's comments that the canopy should be maintained or replaced, and that the landscaping should give preference to native and indigenous plants in accordance with the Native Hawaiian concept of mālama `āina.

OHA has concerns about the amount of impermeable surfaces present in one of Honolulu's water recharge areas.

OHA would like the final EA to contain a more detailed study of the impacts of the septic tank and leach field.

OHA would like to see a more detailed analysis of the project's impacts on the Moleka Trail.

OHA would like the applicant's assurances that, should iwi kupuna or Native Hawaiian cultural or traditional deposits be found, work will stop and the appropriate agencies contacted.

Applicant Response

*The landscaping plan will add twenty replacement trees to plug the hole in the canopy. The replacement trees will be kukui, ōhi`a, koa, and plumeria.*

*The applicant will replace many of the impermeable surfaces with permeable grass blocks.*

*The applicant will coordinate with the Department of Health's Wastewater Branch on their Individual Wastewater System.*

*The Moleka Trail runs 20–40' below the property on the north side, and 60–80' below the property on the west. There is heavy vegetation between the property and the trail, and the applicant does not expect any noise or visual impacts.*

*The applicant will stop work and notify the State Historical Preservation Division should iwi kupuna or Native Hawaiian cultural or traditional artifacts be found during construction.*

DLNR – Land Division

No comments

DLNR – Division of Forestry and Wildlife

No comments

DLNR – Na Ala Hele

The proposed residence appears to be in close proximity to the Moleka Trail, and there might be noise or visual impacts on trail users. Na Ala Hele recommends incorporating a large green barrier into the landscaping plans, and allowing Na Ala Hele staff to conduct a site visit on the parcel.

Applicant's Response

*The Moleka Trail runs 20–40' below the property on the north side, and 60–80' below the property on the west. There is heavy vegetation and a bamboo forest between the property and the trail, and the applicant does not expect any noise or visual impacts. The landowner would welcome a visit from Na Ala Hele staff.*

DLNR – Office of Conservation and Coastal Lands

The calculations for developed area exclude the western lanai and the garden lanai. OCCL cannot tell from the application if these lanai rest on the natural grade or if they rest on a

manually-created grade. We will also like to see more details about the 'garden lanai,' as the current design gives it the appearance of a carport.

OCCL is concerned with the amount of canopy that is being removed, and with the landscaping plan's reliance on non-native species.

OCCL is concerned about the large number of impermeable surfaces in the area.

OCCL would like to see more discussion of the impact the project might have on the Moleka Trail

*Applicant's Response*

*The Western lanai rests on the natural grade, and is thus not included in the calculations towards the Maximum Developed Area.*

*The landscaping plan will add twenty replacement trees to plug the hole in the canopy. The replacement trees will be kukui, ōhi`a, koa, and plumeria.*

*The applicant will replace many of the impermeable surfaces with permeable grass blocks.*

*The Moleka Trail runs 20–40' below the property on the north side, and 60–80' below the property on the west. There is heavy vegetation and a bamboo forest between the property and the trail, and the applicant does not expect and noise or visual impacts.*

**ANALYSIS:**

Following review and acceptance for processing, the applicant was notified, by letter dated October 29, 2007 that:

1. The SFR was an identified land use within the Conservation District, pursuant to Hawai'i Administrative Rules (HAR) §13-5-24 *Identified land uses in the resource subzone, R-8 Single Family Residence, (D-1)*; that this use required a permit from the DLNR; and that the final decision as to whether to grant or deny the permits lay with the Board of Land and Natural Resources (BLNR).
2. Pursuant to HAR §13-5-40 *Hearings*, no public hearing was required.
3. Pursuant to HAR §13-5-31 *Permit applications*, the permit required that an environmental assessment be carried out.

The draft environmental assessment (DEA) for the project was submitted to the Office of Environmental Quality Control (OEQC) and published in the November 8, 2007 issue of the *Environmental Notice*. A Finding of No Significant Impact (FONSI) was published in the OEQC's *Environmental Notice* on February 8, 2008. The 30-day challenge period for the FONSI ended March, 2008 without a challenge.

**§13-5-30 CRITERIA:**

The following discussion evaluates the merits of the proposed land use by applying the criteria established in HAR §13-5-30.

- 1) *The proposed use is consistent with the purpose of the Conservation District.*

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare.

The proposed use is an identified land use in the Conservation District. Staff had concerns regarding the dimensions of the proposed use; most of these were addressed by the applicant and will be discussed in the following section.

Staff also has concerns about the large level of grading required for the project, and questions whether grading has been "kept to a minimum" as required by HAR §13-5 Exhibit 4.

- 2) *The proposed land use is consistent with the objectives of the Subzone of the land on which the use will occur.*

The objective of the Resource Subzone is *to develop, with proper management, areas to ensure sustained use of the natural resources of those areas*

Staff notes that the state has established residential standards for residences in the Conservation District that are designed to promote proper management of Conservation lands. This plan meets those standards. Proper management also requires that a project be designed in accordance with site-specific characteristics in mind. The Tantalus area is a tropical rain forest, and part of the water catchment area for urban Honolulu. As such, the applicant modified their proposal to decrease the amount of impermeable surfaces and to increase the amount of canopy that would remain on site.

- 3) *The proposed land use complies with the provisions and guidelines contained in Chapter 205A, HRS entitled "Coastal Zone Management", where applicable.*

The project complies with the policies and objectives of the Coastal Zone Management Program.

- 4) *The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.*

Staff notes that the proposed project will not have any adverse impact to existing natural resources within the surrounding area, community or region, provided that adequate mitigation measures are implemented. Staff is particularly concerned about the amount

of grading required for the project, given that the parcel is in an important watershed area.

Staff notes that the proposed project will not detract from the rural character of the area.

- 5) *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

Staff is of the opinion the design of the proposed SFR will fit into the locality and surrounding areas, with the use of Best Management Practices and without significant or deleterious effects to the locality, surrounding area and parcel. However, staff also believes that projects that approach the Maximum Developed Area allowed under HAR §13-5 need to take additional mitigative measures to lessen some of the impacts large projects have on the environment.

- 6) *The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.*

Staff notes the applicant has taken the appropriate steps to mitigate any potential impacts, and to maximize and enhance the natural beauty and open space characteristics of the subject parcel. The proposed project is intended to blend in visually with the surrounding area.

- 7) *Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.*

The proposed project does not involve subdivision of Conservation District land.

- 8) *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

The proposed action will not be materially detrimental to the public health, safety and welfare. Staff concurs with the applicant.

#### **DISCUSSION:**

The applicant proposes to construct a 4996 square-foot, 4 bedroom, 4.5 bath residence two-story residence. The developed area calculations also include a family room, dining room, and living room; a cistern pump room and generator equipment room; and a porte-cochere. Excluded from these calculations is a 272 square foot lanai on the house's western side and a 1224 square-foot "garden lanai" below the master bedroom. The western lanai rests on grade, and thus is not included in the calculations for figuring the Maximum Developed Area.

The parcel is one of five located on Pu'u Kākea Place, a privately-owned cul-de-sac in the Tantalus neighborhood (a.k.a. the Brash property). The Board of Land and Natural Resources approved Conservation District Permit (CDUP) OA-2289 in 1990 for the consolidation and resubdivision of the five properties, and the construction of a single-family residence on each.

There are residences on three of the five lots. OCCL notes that a condition of CDUP OA-2289 was that construction needed to commence within one year of its approval; this proposed residence would therefore not fall under CDUP OA-2289 and will need a new permit.

**Staff had a number of concerns regarding the developed area, the landscaping plans, and the extent of impermeable surfaces.**

**Developed Area:** HAR §13-5 sets a *maximum* developable area of 5000 square feet for a parcel that is larger than one acre. OCCL is of the opinion that this maximum is, like all permits in the Conservation District, a *conditional* limit. It is not guaranteed, and any proposal needs to be considered in light of a project's appropriateness to the immediate landscape.

When a proposal comes in for a residence that approaches the maximum limit, OCCL believes in taking a conservative look at how the MDA is calculated, and in requesting that any residence incorporate additional mitigative measures to compensate for the large size.

The applicant's original proposal exceeded the allowable developed area; the application was not accepted for processing until the proposed design had been modified.

OCCL had remaining concerns regarding the "garden lanai" underneath the master bedroom (refer to Exhibit 2). This covered 34'x36' space is adjacent to the driveway and open on three sides. Staff was concerned that the space could be used as a porte-cochère or carport, either of which would need to be counted towards the MDA.

The applicant has modified the design so that the area is landscaped with plants and rock gardens. While it still appears to be living space, OCCL acknowledges that, as an on-grade lanai, it would be exempt from the MDA calculations.

However, the applicant states that the carport is 200 square feet, while the floor plan shows that the carport is closer in size to 500 square feet. This would create a total developed area of 5296 square feet, which surpasses the maximum allowed under HAR §13-5 Exhibit 4.

Staff will recommend that the Board of Land and Natural Resources grant *preliminary* approval to the proposed residence **with the condition that the design will need to be first modified to bring it into compliance with HAR §13-5 EXHIBIT 4 SINGLE FAMILY RESIDENTIAL STANDARDS**, resubmitted, and approved by OCCL prior to any construction activities.

The size of the project also requires a large amount of grading. HAR §13-5 Exhibit 4 requires that *grading/contouring of property kept to a minimum with consideration of slope*. OCCL is not convinced that grading has been kept to a minimum, and is concerned about this and its effect on drainage patterns in the area.



OCCL notes that the applicant will need to secure a grading permit from the City and County Department of Planning prior to commencing work. **We will request that a condition of any Conservation District Use Permit will be to submit a Drainage Plan and Grading Permit to our Office for review and approval** after the Grading Plan has been approved by the County but prior to commencing any construction activities.

**Impermeable Surfaces:** The Tantalus area is an important water recharge area for urban Honolulu. Paved areas in the proposal include a 3120 square foot driveway and a 4544 square-foot 'turn-around' area bounded by a rock wall. There is a total of 13,500 square feet of impermeable surface, 7058 square feet of which are not under roof and thus not part of the water catchment system.

The applicant has attempted to mitigate this by replacing the cement in the turn-around area with permeable grass blocks. OCCL feels that this is a more appropriate material for use in the Conservation District than impermeable cement.

**Landscaping:** The original landscaping plans called for the removal of two dozen trees, but only involved the replanting of two 25-gallon kukui. Proposed new plantings incorporated a mix of kī, red ginger, monstera, tree fern, Augustine grass, and the invasive pothos vine (a.k.a devil's ivy, *Epipremnum aureum*). The plans called for the preservation of a single *Tetropandra gynoscarpa*, a rare species, found on the property.

The forest canopy provides important environmental functions, and OCCL discourages the opening of the canopy without either replanting with a comparable number of native trees or a specific conservation goal [i.e. on parcels similar to this we have witnessed a resurgence in native species when the invasive species have been removed].

OCCL had additional concerns with a landscaping plan that relied heavily on introduced and, in one case, invasive species. OCCL did not feel that this was appropriate for the Conservation District.

The applicant submitted an amended landscaping plan that including adding twenty replacement trees to plug the hole in the canopy. The replacement trees will be kukui, ōhi`a, koa, and plumeria. OCCL strongly supports this modification. However, we note that the plan still calls for the planting of the invasive pothos vine along the properties perimeter.

The pothos vine has received a risk factor of 9, or 'High,' from Pacific Islands Ecosystems at Risk (PIER)<sup>1</sup>. OCCL does not believe that this is an appropriate plant for the any landscaping in Hawai'i. OCCL will recommend that no plants with a score of 6 or higher (High Risk and above) from PIER be included in any landscaping plans.

There were additional concerns regarding the project's potential impacts on the nearby Moleka Trail, part of Na Ala Hele's Makiki network of trails. After careful analysis of the plan, OCCL believes that the trail and the residence will be buffered by enough bamboo and miscellaneous vegetation that any impacts on trail users will be minimal.

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<sup>1</sup> Risk assessments can be found online at [www.hear.org/pier](http://www.hear.org/pier)

Therefore, staff recommends the following:

**RECOMMENDATION:**

That the Board of Land and Natural Resources APPROVE CDUA OA-3446 for the proposed Chan residence at Tantalus, Honolulu, O'ahu, TMK (1) 2-5-18:32, subject to the following terms and conditions:

1. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, State and county governments, and the applicable parts of Section 13-5-42, HAR;
2. The applicant, its successors and assigns, shall indemnify and hold the State of Hawai'i harmless from and against any loss, liability, claim or demand for property damage, personal injury or death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors and agents under this permit or relating to or connected with the granting of this permit;
3. The applicant shall comply with all applicable Department of Health administrative rules. Particular attention should be paid to Hawai'i Administrative Rules (HAR), Section 11-60.1-33, "Fugitive Dust" and to Chapter 11-46, "Community Noise Control," and Chapter 11-54 National Pollutant Discharge Elimination System;
4. The applicant will modify the proposed design to bring it into compliance with HAR §13-5, EXHIBIT 4: SINGLE FAMILY RESIDENTIAL STANDARDS. The applicant should submit a conceptual design to OCCL for review and approval prior to the preparation of final construction plans, and prior to the commencement of any construction activities;
5. The applicant will get an approved Grading Permit from the City and County of Honolulu, Department of Planning and Permitting, and submit this and a Drainage Plan to OCCL for review and approval prior to commencing with any construction activities;
6. Before proceeding with any work authorized by the Board, the applicant shall submit four copies of the construction plans and specifications to the Chairperson or his authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three copies will be returned to the applicant. Plan approval by the Chairperson does not constitute approval required from other agencies;
7. Any work or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with construction plans that have been approved by the Department; further, all work and construction of the residence and infrastructure must be completed within three years of the approval. It is understood that the reforestation plan is an ongoing project;

8. The applicant shall notify the Office of Conservation and Coastal Lands in writing prior to the initiation, and upon completion, of the project;
9. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;
10. The applicant will use Best Management Practices for the proposed project;
11. The applicant will give preference towards using native plants all landscaping work;
12. The applicant understands and agrees that this permit does not convey any vested rights or exclusive privilege;
13. In issuing this permit, the Department and Board have relied on the information and data that the applicant has provided in connection with this permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
14. In the event that unrecorded historic remains (i.e., artifacts, or human skeletal remains) are inadvertently uncovered during construction or operations, all work shall cease in the vicinity and the applicant shall immediately contact the State Historic Preservation Division;
15. The applicant shall provide documentation (i.e. book/page document number) that this approval has been placed in recordable form as a part of the deed instrument, prior to submission for approval of subsequent construction plans;
16. The single family dwelling will not be used for rental or any other commercial purposes unless approved by the Board;
17. The applicant will contact OCCL for any permitting requirements should they change the scope of the project;
18. That the landscaping will not introduce any plants that have received a risk-factor score of 6 (High) or more from Pacific Islands Ecosystems at Risk project.
19. Other terms and conditions as may be prescribed by the Chairperson; and
20. That failure to comply with any of these conditions may render this Conservation District Use Permit null and void.

Respectfully Submitted,



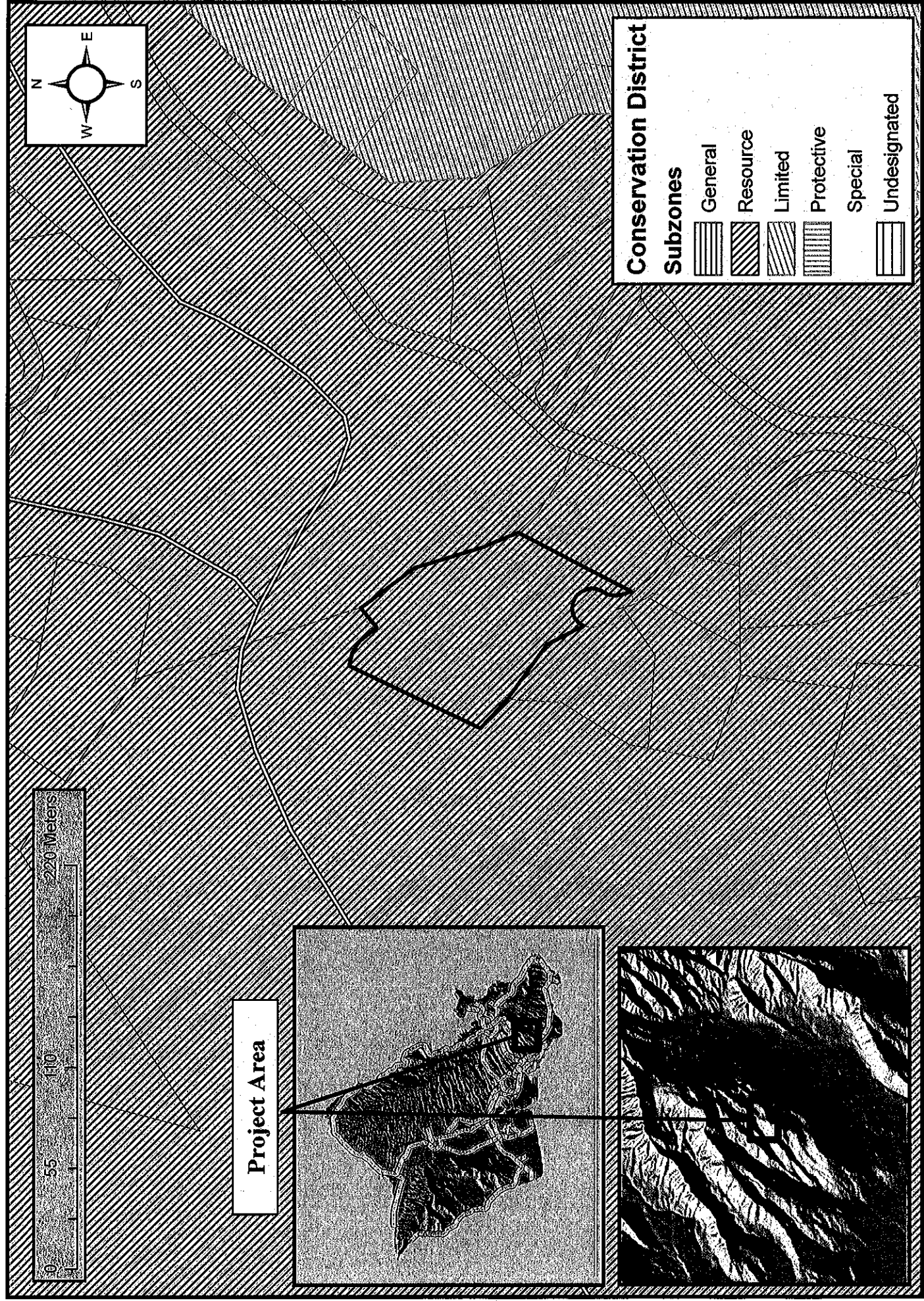
Michael Cain  
Staff Planner

Approved for Submittal:



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LAURA H. THIELEN, Chairperson  
Board of Land and Natural Resources





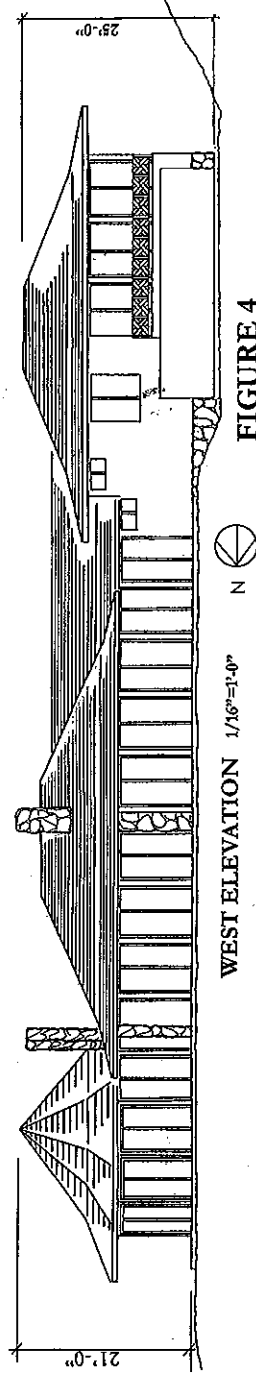
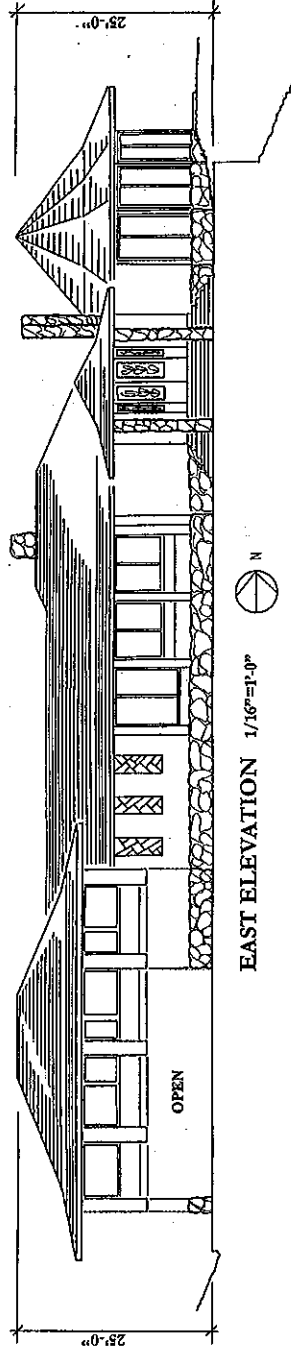
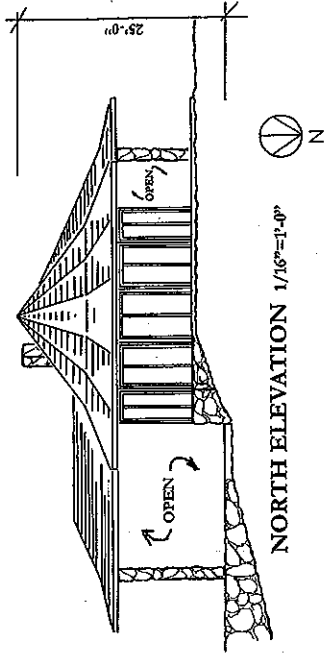
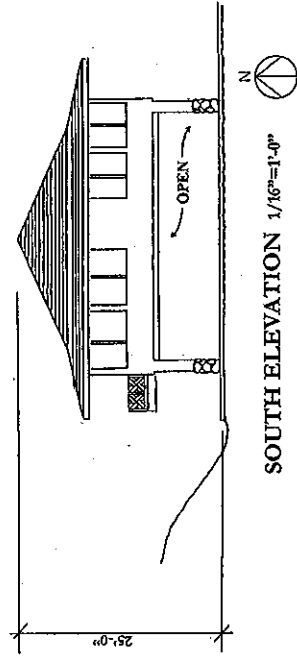


FIGURE 4  
EAST & WEST ELEVATIONS  
Chan Residence  
Tantalus, Oahu

0 4 8 12 16 20 24 28 32  
Feet  
OSUMI NAKAJ MAEKAWA  
MAY 2007



**FIGURE 5**  
**SOUTH & NORTH ELEVATIONS**  
 Chan Residence  
 Tantalus, Oahu

0	4	8	12	16	Feet	32
OSUMI NAKAI MAEKAWA						MAY 2007



